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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
CHANNAVAJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 05/21/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,480

Applicant(s)

CANNELL ET AL.

Examiner

Lakshmi S Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-120, 152-155 and 161-163 is/are pending in the application.
- 4a) Of the above claim(s) 41-120, 152-155 and 163 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40, 161 and 162 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

Receipt of request for continued examination and preliminary amendment B, dated 4-9-03 is acknowledged.

Claims 121-151 and 156-160 have been canceled. Claims 161-163 have been added. Claims 1-120, 152-155 and 161-1653 are pending.

Applicants state in their response that new claims 161 and 162, directed to a kit contain the composition of claim 1 and the new claim 163 finds support from claim 155. Upon careful consideration claims 161 and 162 have been grouped with group I, and claim 163 with group III. Applicants stated that they wish to pursue claims 1-40 of group I. Accordingly, with the new regrouping, claims 1-40, 161 and 162 are pending.

Summary of the claims

Instant claims are directed to a composition for durable non-permanent shaping or durable retention of a non-permanent shape of at least one keratin fiber comprising at least one compound chosen from C3 to C5 monosaccharides, wherein the compound is present in an amount effective to impart a durable non-permanent shape to the keratin fiber or to durably retain the shape of the keratin fiber; and a film forming agent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-2, 5, 10, 11, 25, 27-30, 37-39 and 161 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,660,838 to Koga et al (Hereafter Koga, submitted on PTO-1449).

Koga discloses external use preparations comprising xylobiose, in amount of 0.0001 to 20%, preferably 0.1 to 10%. Example 7 (col. 10) of Koga is specifically directed to a hair shampoo, with 8.9% xylobiose. Koga discloses the composition in the form of a cream, lotion, ointment etc (col. 10, claim 3) and also discloses addition of cosmetic additives such as polyethylene glycol monostearate (example 7 and col. 2-3), which reads on the claimed additive (claim 150). Example 7 recites hydroxymethylpropyl cellulose, which reads on nonionic film-forming agent.

Instant claims recite the limitation "for durable non-permanent shaping", which is an intended use that carries no patentable weight. Koga discloses the claimed amounts of xylobiose in the hair compositions and accordingly the ability to impart the claimed effect is inherent to Koga. Therefore, Koga anticipates the instant claims.

Claim Rejections - 35 USC § 103

Claims 1-4, 10-40, 161 and 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pub. No. US 2002/0031483 A1 to Beck et al (hereafter collectively Beck).

Beck teaches a hair treatment composition comprising a compound chosen from a TCA cycle intermediate, a carbohydrate, a sugar, a fatty acid product or a glycolysis product.

Appropriate sugars include trioses such as glyceraldehydes (aldose), and dihydroxyacetone (ketose), tetroses such as erythrose, threose, and erythrulose, pentoses such as ribose, arabinose, xylose, lyxose, ribulose and ribulose phosphate and xylulose, which read on instant claims 121-

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135. Further, Beck teaches Furanoses, pyranoses, phosphate derivatives of sugars (page 1, paragraph 0015). In col. 2, paragraph 0041, Beck teaches the film-forming cationic polymers such as Polyquaternium 16, which is also claimed. Beck also teaches that the composition preferably contains 0.01% to 0.5% of the useful compounds (page 1, paragraph 0018), which falls within the claimed range of 0.01% to 10%. Beck teaches the compositions in the form of a shampoo or used in a conditioner composition, which read on the instant dispersion or emulsion (page 1, paragraph 0020). Further, Beck suggests addition of suitable surfactants, polymers, conditioning agents, adjunct materials and water to the compositions (pages 2 and 3, and examples 4-9 on page 5).

Beck teaches that the composition is used for hair treatment, in particular for oxygen consumption of hair follicle and thus stimulating the hair growth. Beck does not teach instant durable non-permanent shaping of hair. However, as explained the recitation of intended use does not carry patentable weight in composition claims. Further, amount of compounds taught by Beck is within the claimed range of monosaccharides. Accordingly, it would have been obvious of one of an ordinary skill in the art at the time of the instant invention to use the monosaccharides i.e., trioses, tetroses etc., containing various cosmetic additives such as cationic polymers (Polyquaternium series of compounds) in the hair treatment composition in the range of 0.01 to 0.5% with an expectation to stimulate the growth of hair follicle because Beck suggests that the sugars provide the required oxygen supply for the growth of hair follicle.

While Beck does not recognize the claimed effect, Beck teaches sugars in the same amounts as claimed. Accordingly, absent showing evidence to the contrary, the hair

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compositions containing 0.01% to 0.5% of sugars such as trioses or tetroses possess the ability to impart the claimed durable non-permanent shaping of hair fibers.

Claims 1-40, 161 and 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,690,924 to Keil et al (Keil) in view of Pub. No. US 2002/0031483 A1 to Beck et al (hereafter collectively Beck).

Keil teaches hair treatment compositions comprising chitosan, 2-pyrrolidone carboxylic acid and anionic or nonionic film forming polymers or other natural film forming polymers for increased combability, care and fixing of hair. Among the film-forming polymers, Keil suggests the polymers of the instant claims (col. 2, lines 35-61) such as LUVISKOL. The examples of Keil are directed to hair compositions (hair fixing as well as a shampoo with hair fixing action-example 10) and contain various film-forming polymers (see col. 5-8). Keil teaches cosmetic additives of the instant claims but does not teach the instant monosaccharides.

Beck, discussed above, teaches a hair treatment composition comprising a compound chosen from a TCA cycle intermediate, a carbohydrate, a sugar, a fatty acid product or a glycolysis product. Appropriate sugars include trioses such as glyceraldehydes (aldose), and dihydroxyacetone (ketose), tetroses such as erythrose, threose, and erythrulose, pentoses such as ribose, arabinose, xylose, lyxose, ribulose and ribulose phosphate and xylulose, which read on instant claims 121-135. Further, Beck teaches Furanoses, pyranoses, phosphate derivatives of sugars (page 1, paragraph 0015). In col. 2, paragraph 0041, Beck teaches the film-forming cationic polymers such as Polyquaternium 16, which is also claimed. Beck also teaches that the

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composition preferably contains 0.01% to 0.5% of the useful compounds (page 1, paragraph 0018), which falls within the claimed range of 0.01% to 10%.

Accordingly, it would have been obvious of one of an ordinary skill in the art at the time of the instant invention to use the monosaccharides i.e., trioses, tetroses etc., containing various cosmetic additives such as cationic polymers (Polyquaternium series of compounds) of Beck in the in the hair treatment composition of Keil containing the film-forming polymers for fixing and as well as shampooing the hair, with an expectation to stimulate the growth of hair follicle because beck suggests that the sugars provide the required oxygen supply for the growth of hair follicle because Beck suggests that the sugars provide the required oxygen supply for the growth of hair follicle. Further, supplying a hair fixing or a shampoo composition in the form of gel or lotion or others read on the instant kit claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala
Examiner
Art Unit 1615 May 17, 2003